



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

Am

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/998,304	11/20/2001	Debashis Haldar	1776	4837

28005 7590 06/20/2005

SPRINT
6391 SPRINT PARKWAY
KSOPHT0101-Z2100
OVERLAND PARK, KS 66251-2100

EXAMINER

SUAZO, RAINIER A

ART UNIT PAPER NUMBER

2144

DATE MAILED: 06/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/998,304

Applicant(s)

HALDAR ET AL.

Examiner

Rainier Suazo

Art Unit

2144

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 8-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claim 7 is canceled by Applicant's amendment submitted with response filed on 04/18/2005. Claims 1-6 and 8-26 are pending in this application.

Objections

2. The disclosure is objected to because of the following informalities: Left margins are less than 1 inch. See MPEP § 1.52. Appropriate correction is required.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-6, 9-12 and 14 provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 2-3 and 8-11 of copending Application No. 10/138,364. Although the conflicting claims are not identical, they are not patentably distinct from each other because the present claims recite a method where the present claims are broader in scope than the claims cited above in copending Application No. 10/138,364. The copending Application No.

10/138,364 further limits the invention determining an extent to which the Internet user viewed a web page. It is noted that besides the new limitations the differences between the claims cited above in the copending applications are word variations such as:

a) web pages sent to a user exchanged by user viewed a web page.

An example of such word variations is shown in the following table a.

Table a:

Application Number: 09/998,304	Application Number: 10/138,364
<p><u>Claim 1.</u> A method of measuring an Internet user's level of interest in a given subject, the method comprising:</p> <p>establishing a count of <u>web pages sent to a user</u> that each contain at least a threshold number of keywords related to the given subject; and</p> <p>using the count as a basis to establish a measure of the user's interest in the given subject.</p> <p><u>Claim 14.</u> The method of claim 12, wherein <u>each keyword has a respective value</u>, and wherein establishing the keyword count value, K, comprises,</p> <p>for each web page of a plurality of web pages sent to the user: establishing a sum of the values of keywords related to the given subject matter that appear in the web page.</p>	<p><u>Claim 1.</u> A method of measuring an Internet user's interest level in a given subject, the method comprising;</p> <p>determining an extent to which the Internet <u>user viewed a web page</u>;</p> <p>establishing a count of keywords related to the given subject that appear in the web page;</p> <p><u>scaling the count</u> by a scaling factor reflecting the extent to which the Internet user viewed the web page, so as to produce a scaled keyword count; and</p> <p>using the scaled keyword count as a basis to establish a measure of the Internet user's interest level in the given subject.</p>

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-5 12, and 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herz (U.S. Patent Number **6,460,036 B1**), hereinafter referenced to as Herz in view of Eichstaedt et al. (U.S. Patent Number **6,654,735 B1**) hereinafter referenced to as Eichstaedt.

Regarding claims **1 and 12**, Herz taught a method/system for measuring an Internet user's level of interest in a given subject comprising:

establishing a count of web pages sent to a user that each contain at least a threshold number of keywords related to the given subject (**column 13 lines 5-17, column 15 lines 25-34 and column 17 lines 10-24**); and

using the count as a basis to establish a measure of the user's interest in the given subject and using a combination of values (**abstract, column 12 lines 44-52, from column 58 line 55 to column 60 line 11 and column 13 lines 5-9**). Herz

expressively disclosed an invention counting relevant words and documents viewed by the user and using such counts to determine a user's interest level, see **column 13**.

Examiner clarifies that Herz taught the evaluation of TF (term frequency) measures that are intrinsically based on keywords (**column 13 lines 5-17**) and later taught a similarity measure clearly dependent, at least in part, on key word counts (TF) (**column 15 lines 25-34**) and later taught matching buyers and sellers based on a threshold of similarity (**column 17 lines 10-24**); such similarity based on keywords. It is appreciated that even though Herz is matching buyers and seller; such sellers are presented to the user in the form of electronic documents.

Herz did not expressively teach the invention *without a user's first created profile*.

Eichstaedt, taught determining the interest level of a user in a particular subject, disclosed a method that determines a user's interest level *without a first created profile* therefore providing a *fully passive method* to determine a user's interest level by analyzing words in the input provided by a user (**abstract, column 11 lines 32-40 and column 12 lines 40-44**).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the methods/systems of Herz with the teachings of Eichstaedt, motivated by Herz to explore the art of searching the Internet (**column 2**

lines 5-12, column 60 lines 44-49) and screening emails (**column 56 lines 44-49**), in order to provide a method/system that initiates the determination of a user interest level analyzing Herz's documents presented to the user with a passive and easier method for the user. Examiner further clarifies that Herz taught or at least suggest utilizing the list of documents having a number of documents (**column 11 lines 42-43**) and Eichstaedt expressly taught the use of a total number of documents representing a numeric value (**Eichstaedt: column 11 lines 51-56**). Therefore the combination taught a numeric value representing the documents visited or sent to the user. Herz further taught pages satisfying a threshold on a particular subject as explained above using Herz teachings found in (**column 13 lines 5-17, column 15 lines 25-34 and column 17 lines 10-24**). Herz further taught the use of the actual count value of keywords in **column 13 lines 5-9**.

Regarding claims **2**, Herz taught a method/system further comprising operating an Internet gateway to carry out the elements of the disclosed invention (**column 57 lines 7-36**). Herz proxy performs the role of an "Internet getaway" by providing an abstraction layer between the user's device and the information sources the user device is accessing, wherein the user accesses the data sources through the proxy server.

Regarding claim **3 and 4** Herz taught a method/system further comprising concluding that the measure is the count and using such measure to provide a service to the user (e.g. access to a list of relevant objects and the electronic documents

representing objects) **(from column 2, line 64 to column 3, line 10, column 7 lines 12-15 and from column 58 line 55 to column 60 line 11).**

Regarding claims **5 and 21**, Herz disclosed an invention in the form of a method and system embodied as a whole or in part as in a proxy server **(column 35 lines 35-41 and column 51 lines 3-23)** which is well known in the art to include machine readable medium having stored thereon a set of instructions executable by a processor to carry out methods wherein the server also include a processor and data storage.

Regarding claims **14**, Herz taught the measuring the interest combining values by adding and dividing then to obtain a measure, such values related to keywords appearing in document and related to a given subject **(column 6 lines 44-48 and column 13-14, in particular column 13 lines 5-9).**

Regarding claim **20**, in view of the specifications normalizing the measure is provided for allowing the comparison of interest level among categories. Eichstaedt taught a category tree in **fig. 3 and column 8 lines 18 to 54**, that uses the interest level to select documents from the categories, therefore comparing the interest between categories and wherein such process depicts the limitation of the claim and in deed inherits the normalization in the measures and the categories in order to be comparable.

5. Claims **6, 8-11, 13-15 and 22** are rejected under 35 U.S.C. 103(a) as being unpatentable over Herz (U.S. Patent Number **6,460,036 B1**), hereinafter referenced to as Herz in view of Eichstaedt et al. (U.S. Patent Number **6,654,735 B1**) hereinafter referenced to as Eichstaedt further in view of Bates et al. (U.S. Patent Number **6,088,707**) hereinafter referenced to as Bates.

Herz modified by Eichstaedt, as applied above to claim **1**, taught the invention substantially as claimed in claim **6, 13-15 and 22**.

Regarding the particular limitations of claim **6, 13-15 and 22**, Herz further taught counting keywords related to the given subject matter (**column 12 lines 44-50 and column 13 lines 5-9**) that appear in the web page (**column 9 lines 31-34 and column 60 lines 44-49**), therefore combination of Herz and Eichstaedt taught the invention substantially as claimed, however the combination of Herz and Eichstaedt did not expressively teach details regarding capping the count at a maximum predetermined number of keywords (threshold).

Bates taught the use of a threshold to trigger a notification to a user, indicating that a document has changes that are measured above the threshold (**abstract, column 11 lines 32-40 and column 12 lines 40-55**). The threshold taught by Bates inherits a limit reached, even if the counters keep counting, which is not, one of ordinary skills in the art would clearly understand that the capped maximum predetermined number is in

deed recorded in the threshold parameter and it is unnecessary to keep counting the keywords above the threshold unless a further need of purpose for such action is found.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the combination of Herz and Eichstaedt with the teachings of Bates, motivated by Herz to explore the art of measuring interest of objects linked to pages on the WWW (**column 9 lines 31-34**), in order to obtain a system that count relevant words in a document and provides a means for determining that a maximum predetermined number has been reached and still retains the capability of ranking results based on the keywords counter computations. Examiner further clarifies that Herz taught or at least suggest utilizing the list of documents having a number of documents (**column 11 lines 42-43**) and Eichstaedt expressly taught the use of a total number of documents representing a numeric value (**Eichstaedt: column 11 lines 51-56**) and the use of a threshold to trigger a notification to a user, indicating that a document has changes that are measured above the threshold (**Bates: abstract, column 11 lines 32-40 and column 12 lines 40-55**). Therefore the combination taught a numeric value representing the documents visited or sent to the user. Herz further taught pages satisfying a threshold on a particular subject as explained above using Herz teachings found in (**column 13 lines 5-17, column 15 lines 25-34 and column 17 lines 10-24**). Herz further taught the use of the actual count value of keywords in **column 13 lines 5-9**.

Regarding claim **8 and 9**, Herz taught establishing a sum of values of keywords related to a given subject matter that appear in the web page from a plurality of pages **(column 7 lines 1-12, column 13 lines 5-9 and column 60 lines 44-49)**.

Regarding claim **9**, Herz taught a method/system further comprising concluding that the measure is the count and using such measure to provide a service to the user (e.g. access to a list of relevant objects and the electronic documents representing objects) **(from column 2, line 64 to column 3, line 10, column 7 lines 12-15 and from column 58 line 55 to column 60 line 11)**.

Regarding claims **10**, Herz taught a method/system further comprising operating an Internet gateway to carry out the elements of the disclosed invention **(column 57 lines 7-36)**. Herz proxy performs the role of an "Internet getaway" by providing an abstraction layer between the user's device and the information sources the user device is accessing, wherein the user accesses the data sources through the proxy server.

Regarding claims **11**, Herz disclosed an invention in the form of a method and system embodied as a whole or in part as in a proxy server **(column 35 lines 35-41 and column 51 lines 3-23)** which is well known in the art to include machine readable medium having stored thereon a set of instructions executable by a processor to carry out methods wherein the server also include a processor and data storage.

Regarding claims **13 and 14**, Herz taught the measuring the interest combining values by adding and dividing then to obtain a measure, such values related to keywords appearing in document and related to a given subject (**column 6 lines 44-48 and column 13-14, in particular column 13 lines 5-9**).

6. Claims **16-19** are rejected under 35 U.S.C. 103(a) as being unpatentable over Herz (U.S. Patent Number **6,460,036 B1**), hereinafter referenced to as Herz in view of Eichstaedt et al. (U.S. Patent Number **6,654,735 B1**) hereinafter referenced to as Eichstaedt in view of Bates et al. (U.S. Patent Number **6,088,707**) hereinafter referenced to as Bates and further in view of Rose et al (U.S. Patent Number **5,724,567**) hereinafter referenced to as Rose.

Regarding claims **16-19**, Eichstaedt taught combining past measures with present measures to provide a combined or composite measure (**column 5 lines 19-40**) and techniques to give different credit (weighted) to the time stamp of an email (document or object) (**column 9 line 64 to column 10 line 10**). Eichstaedt expressively taught the combination of principal and new measure in the form of current and long-term interests and giving less importance to older interests using a scoring function.

The combination of Herz, Eichstaedt and Bates taught the intention substantially as claimed, however the combination of Herz, Eichstaedt and Bates did not teach specific

details regarding establishing a sum of the values of keywords related to the given subject matter that appear in the web page.

Rose, in the same field of endeavor related to improve the retrieval of desirable objects, taught establishing a sum of the values of keywords related to the given subject matter that appear in the web page (**column 6 lines 4-17**). Rose recites, "In a content-based approach, each term, e.g. each word, in a document can be assigned a weight, based on its statistical importance. Thus, for example, words which frequently occur in a particular language are given a low weight value, while those which are rarely used have a high weight value. The weight value for each term is multiplied by the number of times that term occurs in the document." Therefore Rose discloses a mathematical procedure that produces the same result of the claimed invention.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the combination of Herz, Eichstaedt and Bates with the teachings of Rose, motivated by Bates and Rose to explore the art of measuring interest of objects displaying only selected or discriminated objects (**See abstract in Bates and column 4 line 63 to column 5 line 3 in Rose**), in order to obtain a system that count relevant words in a document and provides a means for computing the total of a sum of values corresponding to relevant words the n times the relevant word appears in a document.

Application/Control Number: 09/998,304
Art Unit: 2144

Page 13

7. Claims **23-26** are rejected under 35 U.S.C. 103(a) as being unpatentable over Herz (U.S. Patent Number **6,460,036 B1**), hereinafter referenced to as Herz in view of Eichstaedt et al. (U.S. Patent Number **6,654,735 B1**) hereinafter referenced to as Eichstaedt and further in view of Cooper et al. (MCSE Supporting and Maintaining a Windows NT® Server 4.0 Network) hereinafter referenced to as Cooper.

The proxy server taught by Herz corresponds to the basic definitions of IP home agent, a web server with caching functionality and a user station in a peer-to-peer network communication environment. Moreover the functionalities of a web server and IP home agent were, at the time of the invention, known in the art to be modular in design and therefore easy to be implemented in conjunction with other services within a single device; considering for example the exemplary fact (taught by Cooper) that a computer running Microsoft® Windows NT® Server 4.0 Operating System was fully capable to be configured to route traffic from one network to another, serve as a web server, as well as serving as a user station, all these functionalities provided within a single device. The same Operating System was "out of the box" loaded with Remote Access Service Server to perform functions such as the common functions of an ISP (e.g. receiving narrowband PPP connection requests from a client, providing said client with gateway services to connect to a network coupled to the computer executing the operating system) (See Cooper et al. MCSE Supporting and Maintaining a Windows NT® Server 4.0 Network, 2001, in particular chapter 7 and 9). Moreover making integral is not a patentable feature (In re Larson, 340 F.2d 965, 968, 144 USPQ 347,

Art Unit: 2144

349 (CCPA 1965); In re Wolfe, 251 F.2d 854, 855, 116 USPQ 443, 444 (CCPA 1958);
and MPEP 2144.04 (V).

Response to Arguments

Applicant's arguments filed on 04/18/2005 have been fully considered but they are not persuasive.

Regarding Applicant's argument presented in page 10, paragraph 4 regarding that the references cited does not relate keywords to subjects; Examiner disagrees. Applicant is reminded that Herz assignment or classification of documents is responsive, at least in part, to keywords (see Herz in column 13 line 9-11). It is further noticed that in the quoted text presented by the Applicant and extracted from Eichstaedt it is stated **"For simplicity"**. Moreover, Herz extensively and expressively relates keywords to areas of interest of the user; see for example, from column 15, line 34 to column 16, line 1.

Regarding Applicant's argument presented in page 11, regarding that the references cited do not establish a keyword threshold; Examiner disagree. Examiner clarifies that Herz taught the evaluation of TF (term frequency) measures that are intrinsically based on keywords **(column 13 lines 5-17)** and later taught a similarity measure clearly dependent, at least in part, on key word counts (TF) **(column 15 lines 25-34)** and later taught matching buyers and sellers based on a threshold of similarity **(column 17 lines 10-24)**; such similarity based on keywords. It is appreciated that even though Herz is matching buyers and seller; such sellers are presented to the user

in the form of electronic documents. Therefore the keyword threshold is at least suggested since keywords are part of the composite measure used to determine the similarity.

Regarding Applicant's argument presented in page 11, regarding that the references cited do not disclose or suggest capping a keyword count; Examiner disagree. Examiner points out that such limitation was certainly addressed, as found in claim 7, in the First Office Action in the following form: Bates taught the use of a threshold to trigger a notification to a user, indicating that a document has changes that are measured above the threshold (**abstract, column 11 lines 32-40 and column 12 lines 40-55**). The threshold taught by Bates inherits a limit reached, even if the counters keep counting, which is not, one of ordinary skills in the art would clearly understand that the capped maximum predetermined number is in deed recorded in the threshold parameter and it is unnecessary to keep counting the keywords above the threshold unless a further need of purpose for such action is found.

Regarding Applicant's argument presented in page 12, regarding that the references cited do not disclose or suggest the unique combination of values as a measure of user's interest; Examiner disagree. Examiner further clarifies that Herz taught or at least suggest utilizing the list of documents having a number of documents (**column 11 lines 42-43**) and Eichstaedt expressly taught the use of a total number of documents representing a numeric value (**Eichstaedt: column 11 lines 51-56**).

Art Unit: 2144

Therefore the combination taught a numeric value representing the documents visited or sent to the user. Herz further taught pages satisfying a threshold on a particular subject as explained above using Herz teachings found in **(column 13 lines 5-17, column 15 lines 25-34 and column 17 lines 10-24)**. Herz further taught the use of the actual count value of keywords in **column 13 lines 5-9**. Since the limitations are taught the cited prior art in combination, Applicant is encouraged to focus on the further elaboration of the independent claims or on further clarification of the differences between the prior art and the present invention if further prosecution is pursued.

It can be appreciated, as per the above-presented discussion, that all the limitations of the instant invention, as claimed, are taught by the combination of the prior art; for this reason Applicant arguments are not persuasive and the rejections are maintained.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

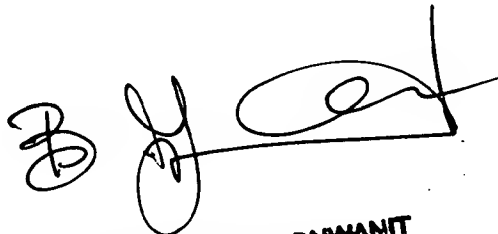
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See attached PTO-892 for details.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rainier Suazo whose telephone number is (571) 272-3931. The examiner can normally be reached on Monday through Friday, 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Cuchlinski can be reached on (571) 272-3925. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Rainier Suazo, MBA
Patent Examiner
Art Unit 2144



BUNJOB JAROENCHONWANIT
PRIMARY EXAMINER